

NOAA's FY 2017 budget request makes targeted investments to support NOAA's mission as the nation's premier environmental intelligence agency supporting economic growth and job creation, and enhancing public safety. NOAA remains committed to our four core priorities: Making Communities More Resilient; Evolving the National Weather Service; Investing in Observational Infrastructure; and Achieving Organizational Excellence.

Provide Information and Services to Make Communities More Resilient

Communities around the country are becoming more vulnerable to natural disaster and long-term adverse environmental changes. 2015 was the warmest year on record and saw 10 weather and



climate disaster events with losses each exceeding \$1 billion across the U.S. These events caused widespread damage and devastated families, businesses, and communities. The Western States are also dealing with one of the most prolonged and severe droughts on record—which impacts agriculture, fishing, manufacturing, and many other businesses that rely on access to water. NOAA's budget invests in the services and data collection across three domains—coastal,

water, and ocean resources—to support communities' efforts to assess their risks and minimize losses in advance and in the aftermath of these challenges.

- Integrated Water Prediction: \$12.3M to enhance NOAA's water prediction and public warning capabilities through new and improved products (e.g., local level flood maps) and enhanced service delivery in coordination with state and federal partners.
- Increase Consultation Capacity: \$19.9M to increase our capacity to complete consultations related to the Endangered Species Act, Marine Mammal Protection Act, and Magnuson-Stevens Fishery Conservation and Management Act. The increased capacity will allow NOAA to protect ESA-listed species, marine mammals, and essential fish habitat while expediting permits to enable sustainable economic activity.
- **Climate Research:** \$30.84M for several interrelated activities that improve our understanding of climate change impacts and help communities increase their resilience to impacts like extreme weather and sea level rise.
- **Integrated Ocean Acidification:** \$11.7M to enhance understanding of vulnerability to ocean acidification and better inform adaptation and mitigation strategies.
- **Regional Coastal Resilience Grants:** An additional \$15M to provide grants to coastal communities for projects that build resilience of coastal regions, communities, and businesses to the negative impacts from extreme weather and events and changing ocean conditions.
- **Fisheries Disasters:** \$9M to assist fishing communities with future declared fisheries disasters.
- National Oceans and Coastal Security Fund: \$10M for a grant program to improve understanding and use of ocean and coastal resources and coastal infrastructure through baseline scientific research, ocean observing, and other programs in coordination with Federal and State partners.



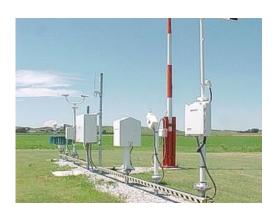


Evolve the National Weather Service

Weather and climate can have huge impacts on the Nation's economy, cost billions of dollars, and claim thousands of lives per year. Important decisions in sectors ranging from food security and public health, to emergency management and national security depend on timely, accurate, and well-communicated forecast information. For this reason, NOAA continues its commitment to build a Weather-Ready Nation and provide the technical underpinning to evolve the NWS to become a more agile organization.

Next Generation Radar (NEXRAD) Service Life Extension: \$8.5M to continue the service life extension for National Weather Service's NEXRAD Doppler infrastructure, which provides real-time data for severe weather forecasts and warnings. For example, 85% of all tornado warnings are based on **NEXRAD** The data. current operational radars are entering the wear-out failure stage, and without this investment NEXRAD availability will continue to degrade, resulting in long-duration radar outages and regional gaps in service.





Automated Surface Observation System (ASOS) Service Life Extension: \$7.5M to initiate a service life extension for the nation's primary surface weather observing system. ASOS information helps the NWS to increase the accuracy and timeliness of its forecasts and warnings to increase aviation safety and efficiency. Without this investment, ASOS availability will degrade rapidly beginning in 2017, causing data outages and regional gaps in service.

Invest in Observational Infrastructure

NOAA is the only federal agency with the operational responsibility to provide critical and accurate weather, water, ocean, climate, and ecosystem forecasts. Our global observing systems are the foundation of the information and data we provide – without them forecast reliability would decay and fail to meet the Nation's growing needs for more precision. We must ensure NOAA's fleet of research vessels and observational platforms can continue to provide the environmental intelligence needed to meet our mission.

Polar Follow On Satellite Program (PFO): An additional \$23M to advance the development of a PFO program to ensure continuity of polar satellite observations — the primary data input for NOAA's numerical weather prediction models — through 2038.

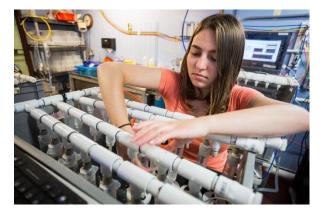


- **Commercial Data Buys:** An additional \$2M to continue efforts to seek opportunities to test and validate data from commercial satellite systems and, if testing is successful, support pilot projects of commercial data buys for operational use.
- Fleet Recapitalization: An additional \$24M for the acquisition of a Regional Survey Vessel (RSV) to support fishery surveys, habitat studies, hydrographic surveys, and disaster response. NOAA's fleet is aging, with half of its vessels scheduled to retire within the next 10-12 years. Both regional-class vessels and ocean-class survey vessels (OSV) will be decommissioned during this time frame, dictating urgent action to recapitalize these aging assets that are essential to achieving NOAA's mission.
- Research & Development High Performance Computing Recapitalization: \$6.3M to
 establish a new funding model to provide stable and up-to-date computing capacity for
 NOAA's long-term, long-lead time weather and climate research. The funding will allow
 regular refresh and recapitalization of NOAA's R&D high performance computers via a
 leasing mechanism, which shifts the burden of addressing future equipment obsolescence
 to the service provider.

Achieve Organizational Excellence

Each and every day, NOAA's employees strive to promote organizational excellence and execute our mission with discipline and consistency. To sustain our critical human capital we must recruit, retain, reward, and develop the best talent possible and ensure that our customers receive the best service possible. To do that, we need infrastructure in place to support a workforce of the 21st century with Human Resource employees and services that enable us to expeditiously recruit the expertise and talent that Congress and our partners demand.

- Research Transition Acceleration Program: \$10M to accelerate the transition of promising NOAA research to operations and applications. These funds will prioritize projects based on their ability to advance NOAA's mission and benefit society. Accelerating these transitions allows the American public to reap the benefits of Federal investments in research and development.
- NOAA Fisheries Facility Initiative: \$4.6M to initiate preparations for reconstruction of the National Marine Fisheries Service's Mukilteo Research Station in Washington, which plays a key role in research on ocean acidification, marine pollution, and ecosystem recovery. The Northwest Fisheries Science Center cannot use the facility in its current condition past Spring 2020 without repair.



• Re-architecting Data Systems for Mission Resilience: \$6.3M to modernize and streamline NOAA's IT systems and reduce the susceptibility of NOAA's environmental intelligence data to the threat of cyber-attack.



NATIONAL OCEANIC & ATMOSPHERIC ADMINISTRATION